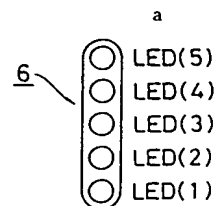


(54) CAMERA

(11) 2-275932 (A) (43) 9.11.1990 (19) JP
 (21) Appl. No. 64-268330 (22) 16.10.1989 (33) JP (31) 89p.16265 (32) 27.1.1989
 (71) KONICA CORP (72) TAKESHI KAKITA(1)
 (51) Int. Cl⁵. G03B17/38, G03B17/18

PURPOSE: To allow an object side to recognize the residual time of a self timer without providing additional parts by arranging a means displaying the detected result of input sound in front of a camera and constituting such that the residual time of the self timer is displayed by the same display means.

CONSTITUTION: The means displaying the detected result of input sound pressure is arranged in front of the camera to constitute the camera in such a way that the residual time of the self timer is displayed by the same display means. For instance, when the self timer is set, an LED displays a residual time of 10 - 6 seconds by flickering vertically to inform the object side that the self timer is currently operating. When the residual time comes to five sec, all the LEDs 1 - 5 light up, when the time comes to four seconds, four LEDs light up, and when the time comes to three seconds, three LEDs light up. Namely, as the residual time decrements, the LEDs go off one by one, and when the time is up, all the LEDs go off. Under the simple constitution, the residual time of the self timer can be surely recognized by the object side.



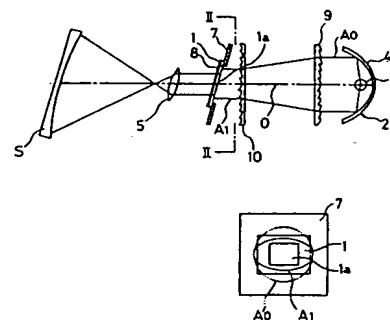
a: LED display

(54) LIQUID CRYSTAL PROJECTOR

(11) 2-275933 (A) (43) 9.11.1990 (19) JP
 (21) Appl. No. 65-72098 (22) 23.3.1990
 (71) CASIO COMPUT CO LTD (72) OSAMU UMEDA
 (51) Int. Cl⁵. G03B21/14, G02F1/13, G09F9/00

PURPOSE: To make the best use of illuminating light from a light source part so as to irradiate a picture with the light by turning the luminous flux of the illuminating light into a collimate one again by a second linear Fresnel lens after a first linear Fresnel lens converges the flux on the narrower width direction of the display part of a liquid crystal display panel and illuminating the liquid crystal display panel.

CONSTITUTION: The first linear Fresnel lens 9 which converges the luminous flux of the illuminating light from the light source part 2 on the narrower width direction of the rectangular display part 1a of the liquid crystal panel 1 and the second linear Fresnel lens 10 which corrects a luminous flux with narrowed width into a luminous flux in parallel with an optical path 0 are provided between the light source part 2 and the liquid crystal display panel 1. Much of the unused rays of light among the rays of light irradiating the part other than the display part conventionally can be made incident on the display part of the liquid crystal display panel; therefore the illuminating brightness of the liquid crystal display panel can be improved. Thus, a high brightness picture can be projected on a screen plane.



1a: display part, 3: light source lamp, 4: reflector, 5: projecting lens, A₂: illuminating light, B: color filter, S: screen